

Description of the female of *Diesbachia chani* Bragg, 2001

P.E. Bragg, 8 The Lane, Awwsworth, Nottinghamshire, NG16 2QP, U.K.

Abstract

The female and egg of *Diesbachia chani* Bragg, 2001 are described for the first time. Another male is recorded and an ambiguity in the original description is clarified.

Key words

Phasmida, *Diesbachia chani*, Mt. Kinabalu, Borneo.

Introduction

When *Diesbachia chani* Bragg, 2001 was described only the adult male and nymphs of both sexes were available. Shortly after publication of *Phasmids of Borneo* (Bragg, 2001) I visited Kinabalu National Park, accompanied by Mark Bushell and Bettina Bläsing, and collected another adult male. Two years later an adult female was collected just outside the Park by Mark Bushell. The general appearance of the female is similar to *Diesbachia hellotis* (Westwood, 1859), but with smaller wings and a less spinose thorax. This paper describes the female and egg of *D. chani*, and gives data on the most recently collected male.

Diesbachia chani Bragg, 2001

Diesbachia chani Bragg, 2001: 552, fig. 220, map 32D. Sabah, Kinabalu NP, near Park HQ, 1580m. ♂ Holotype (PEB-1064) P.E. Bragg, 30.vii.1990; ♂ nymph Paratype (PEB-1707) P.E. Bragg, 30.viii.1992; ♂ nymph Paratype (C.L. Chan) C.L. Chan & M.Y. Chan 01.v.1986. Sabah, Kinabalu NP, Silau Silau trail. ♂ Paratype (C.L. Chan) C.L. Chan, 21.ix.1991; ♂ nymph Paratype (C.L. Chan) 19.iv.1993; 2♂♂ nymphs Paratypes (C.L. Chan) P.E. Bragg, C.L. Chan & P. Jennings, 27.vii.1990. Sabah, Mt Silam, 2000ft, Lahat Datu. ♀ nymph Paratype (C.L. Chan) W. Mrazek, iv.1982.

New material

Sabah, Kinabalu National Park, HQ area, Bundu Tuhan View trail, ♂ (PEB-3149) P.E. Bragg, 24.viii.2001.

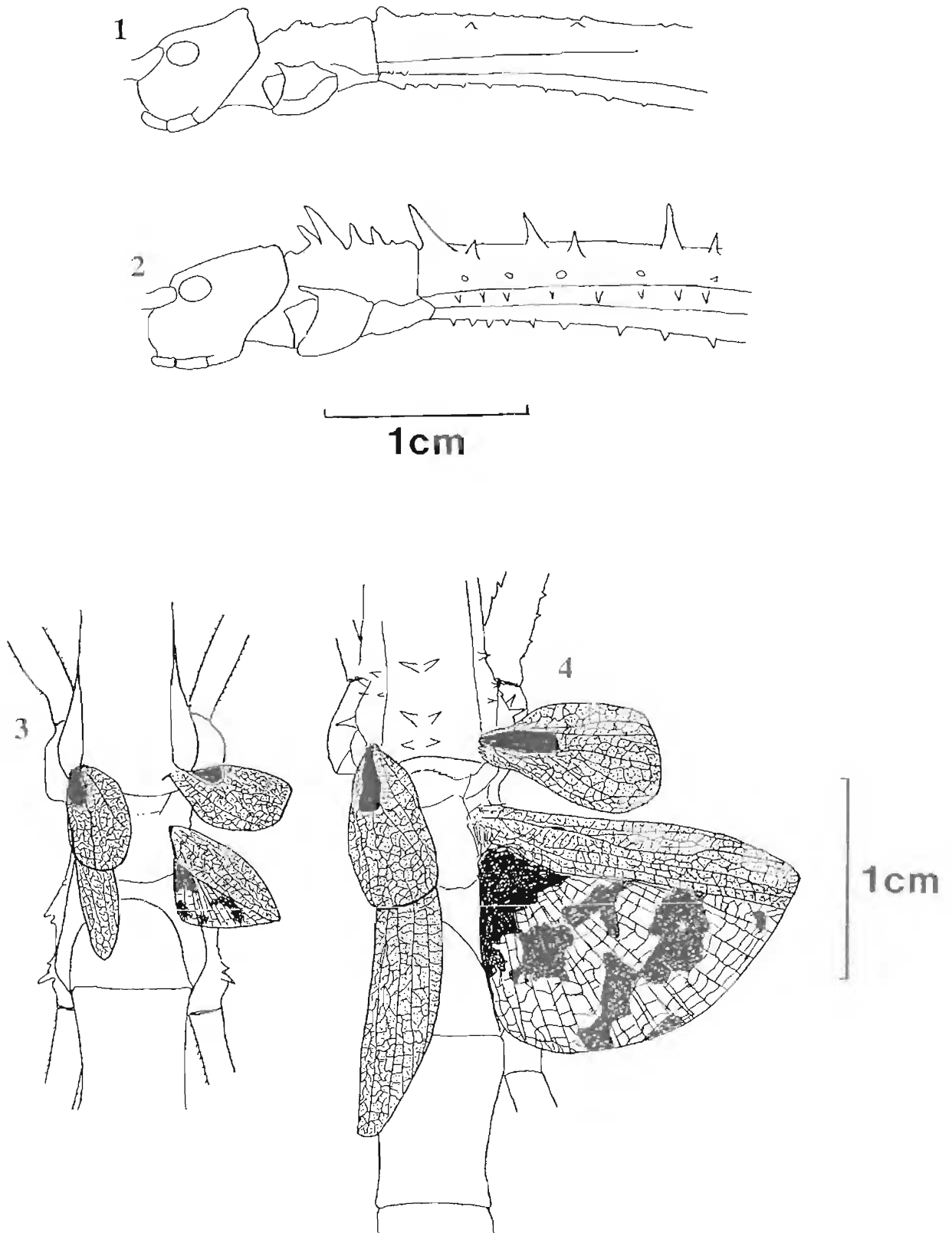
Sabah, Mt Kinabalu, Sonny's, ♀ and one egg (M. Bushell) Mark Bushell, 16.ix.2003.

Description of female (figs 1 & 3)

Head and body almost uniformly dark brown. Legs mottled mid and lighter brown. Elytra very dark brown. Costal region of wing very dark brown, anal region pink with dark brown tessellations. The specimen seems to have darkened as a result of preservation, in life the coloration may have been lighter. Measurements of the female are given in the table below.

Antennae long and slender, light brown with joints darkened; basal segment flattened, second segment with a small tubercle at the base near the outer margin. Head broad, flat, rugulose; posterior margin with two central, distinct, and two very indistinct rounded tubercles, as in the male (see below), there are a third minute pair. Pronotum with a pair of rounded tubercles slightly anterior of the mid point. Mesonotum long, slender, widening slightly towards the posterior; with a pair of small, blunt spines on the anterior margin, and small spine-like tubercles scattered on the dorsal surface (fig. 1). Mesosternum and mesopleurae with numerous small spines. Metanotum slightly wider than long. Metasternum and metapleurae with small spines.

Median segment wider than long. Abdominal segments rugose, dorsally sparingly setose, lateral margins and ventrally distinctly setose. Segments 2-7 of similar length, slightly longer than wide and of almost uniform width; 8th slightly narrower than 7th and clearly wider than long; 9th short, more than twice as wide as long; 10th very short with serrated posterior margin and a longitudinal carina; lamina supraanalis extremely short (almost



Figures 1-4.

1-2. Side view of head and thorax, 1. *Diesbachia chani*, 2. *Diesbachia hellotis*.

3-4. Dorsal view showing wings, 3. *Diesbachia chani*, 4. *Diesbachia hellotis*.

completely hidden when viewed dorsally). Abdominal sternites rugose, and with stout setae which give an almost spinose appearance. Operculum long, slender, rugose, and setose, apex with a very deep notch. Appendicular ovipositor very pronounced.

Legs long and slender. All carinae of femora and tibiae with strong setae and femora with distinct serrations on all ventral carinae, and indistinct serrations on dorsal carinae. Fore tarsi both missing from this specimen. First tarsomere slightly longer than the combined length of tarsomeres 2-4 on hind legs, as long on mid leg; 4th tarsomere very short on both mid and hind legs. Medio-ventral carina of middle and hind tibiae with an almost triangular lobe near the base. All coxae with a stout spine projecting over the coxal-trochantal joint. Elytra almost as wide as long, just covering the base of the hind wing. Wings short, reaching only slightly more than half way along the median segment (fig. 3).

<i>Diesbachia chani</i> Bragg, 2001			
Measurements of female (mm)			
Total length	94	Fore femora	31
Antennae	59+	Fore tibiae	39
Head	5.5	Fore tarsi	missing
Pronotum	6.0	Mid femora	22
Mesonotum	21	Mid tibiae	23
Metanotum	4.5	Mid tarsi	7
Median segment	4.5	Hind femora	33
Elytra	5.0	Hind tibiae	39
Hind wing	6.5	Hind tarsi	9

Description of the egg

Capsule roughly cylindrical, polar end conical, opercular end truncated. Capsule dark brown, rugose with a series of strong ridges. Operculum flat, rugose; surrounded by a collar of thick setae; opercular angle clearly positive. Capsule length 6.8mm, height 2.7mm, width 2.6mm.

The egg is similar to that of *hellotis* (see Bragg, 2001: fig. 221B), but the micropylar plate is more central (although this is variable in *hellotis*, it is usually clearly towards the polar end), and the operculum lacks the spine which is present in some (but not all) eggs of *hellotis*.

Distinguishing *Diesbachia chani* and *D. hellotis*

My key to species of *Diesbachia* (Bragg, 2001: 552) indicates two tubercles on the back of the head of *D. chani* while the description mentions four. There are two reasonably obvious, and two rather indistinct tubercles. More laterally there are irregularities, which could perhaps be considered a third minute, pair. The male found in 2001 has a body length of 74mm, within the range of the type material.

The general appearance shows this species is closely related to *Diesbachia hellotis* (Westwood, 1859). However, the female is easily distinguished by the absence of large spines on the body (see figs. 1 & 2) and by the shorter wings (figs. 3 & 4). Similarly, the male of *chani* lacks strong spines and has wings comparable to the female; the male of *hellotis* is strongly spinose, has full length wings, and flies readily.

Acknowledgements

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References

Bragg, P.E. (2001) *Phasmids of Borneo*, Natural History Publications (Borneo), Kota Kinabalu, Sabah. 772pp.

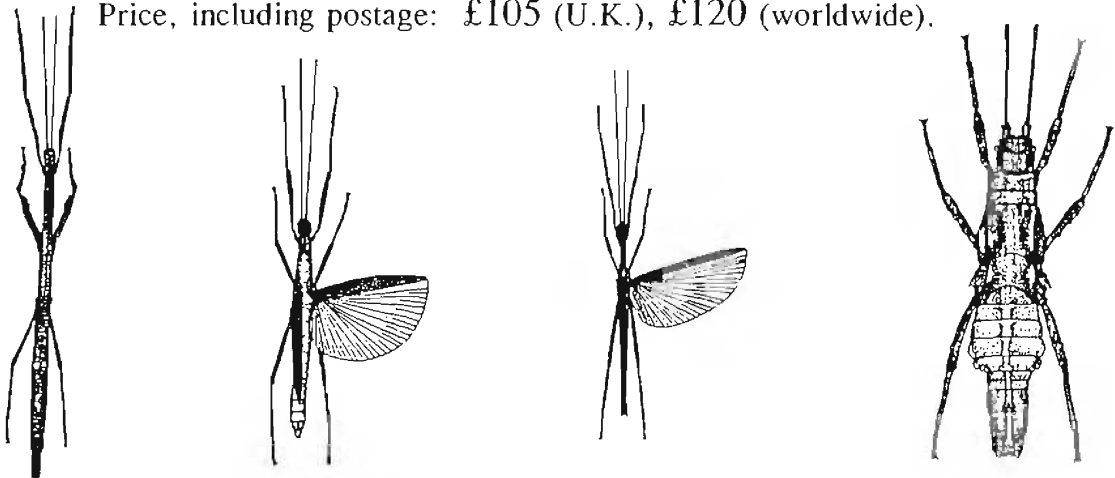
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